Idaho GeoSpatial Committee

Cadastral Technical Working Group - 2001 Report

December 2001

Background 1999-2000:

This Working Group was initially established in November 1999 by the Idaho Geographic Advisory Committee (IGIAC). Membership has been informal and open, including Tribal, Federal, State, Local and Private representation. The initial direction of the Working Group was to improve the accuracy of the BLM's Geographic Coordinate Database (GCDB), a digital model of the Public Land Survey System (PLSS), and to integrate the GCDB with cadastral data sets statewide. Cadastral data refers to both the survey reference system used for describing real property, and the resulting land parcel records.

Bureau of Land Management (BLM) has completed initial PLSS data collection (consisting of digital entry of original General Land Office survey information, circa 1900) for 2119 of 2490 townships statewide, 1019 townships of which are currently developed in GCDB format with the remaining 1100 requiring conversion from the initial collected format (PCCS) to GCDB format. 371 townships are uncollected at this time.

Bureau of Reclamation (BOR), along with contributions from other agencies, had begun an independent GCDB project whereby a contractor (Premier Data, out of Colorado) would be edge-matching GCDB (and USFS CFF data where GCDB had not been developed) to develop a consistent state-wide seamless GIS coverage of the PLSS for use by the Bureau and other interested agencies.

Idaho Department of Lands (IDL) had begun a Legislature directed statewide facilities management program for all state holdings, that includes endowment lands management as well real estate and buildings inventory and management, within a GIS based system. IDL had also completed a project with Bonner County to develop a county-wide parcel polygon coverage that could serve as a pilot for similar development in other counties.

Idaho Department of Water Resources (IDWR) has been involved for years with parcel mapping support in many Idaho counties as part of the Snake River Water Rights Adjudication program.

Idaho State Tax Commission (STC) provides mapping support to Idaho Assessor's Offices statewide. Current adopted computer aided mapping procedures involve the creation of parcel polygons with text attributes, allowing the joining of parcel features with ownership, building and permit databases. At this point in time, over 30 out of 44 Idaho counties (including those working with IDL and IDWR) have computer mapping programs at various levels of accuracy, attribution and completion.

In January 2000 BLM published for review a conceptual model for the operation of a National Integrated Land System (NILS), addressing surveying of the PLSS, measurement management, legal description and parcel records management, and data sharing and distribution.

In March of 2000, Working Group representatives joined representatives from the 18 western states at a Cadastral Forum sponsored by the Western Governor's Association (WGA) in Salt Lake City, where a unified direction was formed to promote the development and integration of the GCDB and the NILS program.

In June 2000 the Working Group adopted the NILS program as a model for development of an Idaho Integrated Land System.

In November 2000 BLM published draft guidelines for developing State Cadastral Plans for a funding proposal generated from the WGA resolution supporting cadastral development. The proposed program was to provide funding of detailed planning efforts to inventory data, collect data, develop and upgrade GCDB, and integrate GCDB with parcel mapping within each state.

The Working Group met in December 2000 to begin development of a draft Idaho Cadastral Plan.

Cadastral Technical Working Group - 2001 Report - continued

Working Group Activity 2001:

In early February 2001, the draft "State of Idaho Cadastral Plan" was completed, was adopted by ITRMC, and was submitted to BLM fo funding consideration.

In April 2001 the draft Idaho Cadastral Plan was presented at the Idaho/Montana Intermountain GIS Conference. Also, a post-conference workshop was presented on "Performing Local Adjustments of the GCDB".

With the evolution of IGIAC into the Idaho GeoSpatial Committee (IGC - Governor's Executive Order 2001-7, April 30, 2001), the Working Group "took the summer off", awaiting direction from the IGC as to specific membership / action / reporting guidelines, as well as awaiting word from BLM regarding their review of the draft Idaho Cadastral Plan.

Federal funding for the BLM State Cadastral program was ultimately not approved for FY 2001/2002/2003. The Federal Geographic Data Committee (FGDC) had been working with Office of Management and the Budget (OMB) on an "I-team initiative" (beginning in July 2000). The I-team initiative is a collaboration between FGDC, OMB, State, local, and tribal authorities, the Open GIS Consortium, etc. It aims to offer institutional and financial incentives to collaborate in building the next generation of framework data (which includes cadastral data). The I-Team initiative carries out long-standing OMB technology objectives. Several states have recently submitted draft I-team plans, very specifically the Utah plan was identified as a potential model to emulate.

The Working Group met in late September 2001, prior to the initial meeting of the IGC, and received updates on programs underway/proposed at BLM, BOR, IDL, IDWR, and the STC. The STC brought forward a proposed 5-year program to develop a statewide parcel data set to integrate and enhance certain internal STC functions with GIS technology. Also, the Working Group specifically discussed the anticipated IGC direction to reformat the draft Idaho Cadastral Plan within the Utah model format.

The IGC met for the first time in early October, to develop operating procedures based on the Governor's Executive Order, and to set direction for the Technical Working Groups. Also, at the direction of the STC Commissioners, Cindy Lou McDonald presented the proposed 5-year STC cadastral plan for IGC approval. The IGC directed the STC to work with the Cadastral Technical Working Group in integrating the proposal within the Cadastral section of the Idaho Framework Data Implementation Plan (being the I-team initiative based plan described above).

The Working Group met again in late October 2001 to discuss in detail the proposed 5 year STC cadastral plan, and to discuss very specific short range actions that would integrate with long range goals, and would get the ball rolling on development of coordinated/standardized cadastral data. The Working Group validated the basic premises established in 1999, that immediate agency needs were for "relative" parcel configuration and attribute data, and for increased accuracy over time. Consequently, the need is to develop/update the Assessor's Office parcel mapping model to integrate GCDB in a dynamic manner, so that parcel maps can accept increased PLSS accuracy as GCDB is updated. Also, because the updating of the GCDB is based on survey control, an on-going workable program for inventory and collection of GPS corner control needs to be implemented.

The STC 5 year cadastral plan includes provisions for (initially) funding prioritized collection of survey control and updating of the GCDB, and the funded development of a standardized statewide parcel data set, consistent with FGDC Cadastral Data Standards and the NILS operational concepts. By sharing approved parcel data with agencies and the counties (with privacy protection measures in place), framework data sharing goals can be realized. This state agency proposal is an excellent example of leveraging internal agency projects and programs to coordinate statewide framework data development and data sharing, while reducing redundant development and costs.

Another consideration for this coming year is the expansion of the Cadastral TWG to include Geodetic Framework Data (to become the Cadastral-Geodetic TWG). There has been discussion regarding developing future HARN monumentation specifically tied to the PLSS, following certain additional documentation requirements to facilitate upgrade of the PLSS/GCDB. A proposed National Geodetic Survey (NGS) pilot program, the NSDI Advisor Program (National Spatial Data Infrastructure – NSDI), would provide \$14.9 million over 5 years for 9 pilot states, to re-focus the cost-share State Geodesist positions to assist local GIS communities improve land information used for GIS in responding to emergencies and managing resources. Expected benefits of the program correspond with the goals of proposed State Cadastral Plan, including development of an integrated cadastre and enhanced data standardization and data sharing. Idaho would like to pursue becoming a pilot state under this program.

With the tragic events in September, there has been an increased focus at the Federal level to integrate State and local government geographic data as the basis for high-resolution critical infrastructure data supporting Homeland Security programs and goals. Cadastral data is one of the primary data sets in this effort, and we will continue to pursue funding opportunities to expedite the inventory and development of data, as well as pursuing voluntary efforts and low cost solutions within the private and public sectors.

Working Group direction for 2002:

- 1) Develop the combined Cadastral/Geodetic TWG mission statement, bylaws, membership representation guidelines and operating procedures consistent with the direction from the IGC.
- 2) Complete the Cadastral and Geodetic sections of the Idaho Framework Data Implementation Plan for review and adoption by the IGC.
- 3) Pursue pilot program funding through the NSDI State Advisor Program.
- 4) Form and support a Geodetic & Survey Control subcommittee to work in conjunction with the Idaho Surveyors Association in developing a website and database to collect and inventory GPS corner control data for use in upgrading GCDB.
- 5) Form and support a Parcel Mapping subcommittee to work with the STC in developing FGDC/NILS compliant mapping standards, and parcel model, that meets agency needs at federal, state and local levels.
- 6) Study the options of fulfilling Cadastral Plan goals through a centralized GIS Service Center and/or a distributed agency based data development and maintenance model.